

What is claimed is:

1. A wavelength locker module comprising:

a prism for dividing incident light into at least first and second branched light beams;

5 a wavelength selective filter for permitting part of the first branched light beam emitted from said prism to pass therethrough;

a first light quantity detector for receiving the part of the first branched light beam having passed through said
10 wavelength selective filter; and

a second light quantity detector for directly receiving the second branched light beam emitted from said prism.

2. The wavelength locker module according to claim 1, wherein said wavelength selective filter has a light transmission
15 characteristic providing more than predetermined ratio of a change in optical transmittance to a change in wavelength of the incident light in a wavelength region including an incident light wavelength.

3. The wavelength locker module according to claim 1, wherein further comprises angle adjustment means for variably
20 adjusting orientation of said wavelength selective filter to said prism, whereby an incident angle of the first branched light into said wavelength selective filter is adjusted to be in a range from 0 deg to 5 deg.

25 4. The wavelength locker module according to claim 1, wherein said prism has a roof-shaped incident surface thereof comprised of first and second inclination surfaces each obliquely extending relative to a normal line of the incident light entering said prism, and said prism branches the incident light into said
30 first and second branched light beams.

5. The wavelength locker module according to claim 4, wherein an angle formed between each of said first and second inclination surfaces and the normal line of the incident light to said prism is in a range from 10 deg to 65 deg.

6. A wavelength controller comprising:

a wavelength locker module according to claim 1;

wavelength variation detecting means for detecting, based on outputs of first and second light quantity detectors of the wavelength locker module, a wavelength variation in incident light entering the wavelength locker module; and

wavelength variation suppressing means for suppressing the wavelength variation in accordance with a detection result obtained by said wavelength variation detecting means.

7. The wavelength controller according to claim 6, wherein said wavelength variation detecting means calculates an output ratio based on the outputs of said first and second light quantity detectors, and detects the wavelength variation in the incident light based on the output ratio and a wavelength variation detection curve representing a relationship between the incident light wavelength and the output ratio.

8. The wavelength controller according to claim 6, wherein said wavelength variation suppressing means includes temperature adjusting means for variably adjusting a temperature of an optical signal generator for use with the wavelength controller.

9. The wavelength controller according to claim 6, 7 or 8, wherein said wavelength locker module is a wavelength locker module according to claim 2.

10. The wavelength controller according to claim 6, 7 or 8, wherein said wavelength locker module is a wavelength locker module according to claim 3.

11. The wavelength controller according to claim 6, 7 or 8, wherein said wavelength locker module is a wavelength locker module according to claim 4.

12. The wavelength controller according to claim 6, 7 or 8, wherein said wavelength locker module is a wavelength locker module according to claim 5.